

*only one*

1. (Currently Amended) A gain-clamped optical amplifier comprising:  
a single optical reflection means, the single optical reflection means installed on an input optical fiber;

optical anti-reflection means installed on an output optical fiber opposite to the input optical fiber having the optical reflection means installed on; and

an optical amplifier comprising an input connected to the input optical fiber and an output connected to the output optical fiber, the optical amplifier configured to be located between the optical reflection means and the optical anti-reflection means, for amplifying an input signal and an optical reflection signal reflected by the optical reflection means;

wherein an amplified spontaneous emission light emitted from the input of the optical amplifier to the into the input optical fiber is reflected by the optical reflection means installed in the input optical fiber and is amplified in the optical amplifier;

wherein the spontaneous emission light inputted to the input optical fiber and reflected by the optical reflection means is in a same direction as the input optical signal; and wherein a change in the input signal is compensated by the amplified spontaneous emission light such that a gain is clamped regardless of a power level of the input signal.

*DISCUSSION  
PURPOSES  
ONLY.*

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